

applying an amount of glue to at least one surface of each said element;

assembling the elements; and

subjecting the assembled elements to pressure in a press;

wherein a waiting time is defined by a lag between said glue application and pressure application steps; and

wherein said glue application step includes controlling an amount of at least one component of said glue applied to a said element at a specific point thereon as a function of said waiting time.

- 2. The method according to claim 1, wherein the glue comprises an adhesive having multiple components, one said adhesive component comprising a hardener and wherein the amount of one of said adhesive components is controlled so as to control a ratio of said hardener to said other adhesive components as a function of said waiting time.
- 3. The method according to claim 2, wherein the glue is a two-component adhesive comprising hardener and a glue, the ratio of hardener to glue is controlled to be lower for longer waiting times.
- 4. The method according to claim 1, wherein the glue is a one-component glue, and the amount of said glue applied to each said element is increased as a function of increased waiting time for each said element.

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8. The method according to claim 4, wherein the amount of glue applied is controlled by controlling movement of the element(s) during glue application.

14. An apparatus for the manufacturing of composite products, wherein a plurality of elements are assembled by gluing them together under pressure, comprising:

an element feeder;

- a glue applicator;
- a stacking unit;
- a control unit; and
- a press;

said control unit being programmable to run at least one of a control sequence for the glue applicator and the element feeder to provide an optimal applied glue amount which varies as a function of a waiting time between glue application and pressing for a given element.

- 15. The apparatus as claimed in claim 14, wherein the control sequence is adapted to control the speed of movement of the feeder, and thereby of the elements through the glue applicator.
- 17. Apparatus for the controlled application of glue to elements to be assembled to a composite structure, comprising
 - an element feeder;
 - a glue applicator; and
 - a control unit;

said control unit being programmable to run at least one of a control sequence for the glue applicator and the element feeder to provide an optimal applied glue amount which varies as a function of a waiting time between glue application and pressing for a given element.

